

APR 2 4 1990

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Charles W. Burke Linwood Mining and Materials Corp. 401 East Front St. Davenport, Iowa 52804

Dear Mr. Burke:

Enclosed is a copy of the Data Reporting/ Qualification Codes sheet, field sheets, and the analytical results for the two ash samples taken during our followup inspection of the Linwood Quarry site. The samples were collected during November 1989 by Ecology and Environment, a contractor for the U.S. Environmental Protection Agency (EPA).

Although various contaminants were detected in these samples, it does not appear that the levels are significant.

This information is forwarded to you in accordance with the provisions of Section 3007(a) of the Resource Conservation and Recovery Act of 1976 (RCRA) as amended, and Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended. If you have any questions regarding these analytical data, please contact Pete Culver of my staff at (913) 551-7707.

Sincerely yours,

Robert L. Morby Chief, Superfund Branch Waste Management Division

Enclosure

cc: Pete Hamlin, IDNR (with enclosure)

Darrell McAllister, IDNR (with enclosure)

bcc: Ralph Langemeier, WATR (w/enclosure)

Luetta Flournoy, IOWA/RCRA (w/enclosure)

30815340

WSTM:SPFD:PREP:CULVER:final:bh:4/3/90:Disk #4:linw-2mi.ned

PREP CULVER PREP FLOURNOY ATSDR

WATR LANGEMEIER SPFD MORBY

MORBY

DATA REPORTING / QUALIFICATION CODES

- U The material was analyzed for, but was not detected. The associated numerical value is the sample detection limit.
- J The associated numerical value is an estimated quantity (explanation attached).
- I The data are invalid (compound may or may not be present). Resampling and/or reanalysis is necessary for verification.
- N Sample not analyzed.

CODES FOR FLASH POINT DATA

- L The sample did not ignite or "flash". This is the highest temperature at which the sample was tested. It is possible that the material may be ignitable at higher temperatures.
- K The sample did ignite or "flash" at the lowest temperature tested. This is usually the ambient temperature at the time of the test. It is possible that the material may be ignitable at even lower temperatures.

ANALYSIS TYPE: METALS, TOTAL

TITLE: LINWOOD QUARRY

MATRIX: SEDIMENT METHOD: CS0788A

UNITS: MG/KG

SAMPLE PREP: ____ ANALYST/ENTRY: PLC REVIEWER: ____ DATA FILE : P29 CASE: 13396

DATA FILE : P29

SAMPLES	DSX04001	DSX04002
ALUMINUM	8400	5800
ANTIMONY	20 U	17 U
ARSENIC	7.9	7.4
BARIUM	76	66
BERYLLIUM	0.69 J	1.5 U
CADMIUM	1.6 U	1.5 U
CALCIUM	240000	220000
CHROMIUM	14 J	8.7 J
COBALT	4.5 J	2.1 J
COPPER	20	17
IRON	9200 J	7800 J
LEAD	32	23
MAGNESIUM	12000	20000
MANGANESE	290 J	290 J
MERCURY	0.38	0.41
NICKEL	120	110
POTASSIUM	3000	3600
SELENIUM	1.6 U	1.2 J
SILVER	3.3 U	2.9 U
SODIUM	1300 J	1400 J
THALLIUM	1.8 J	2.7 J
VANADIUM	460	430
ZINC	35 J	17 J
CYANIDE	N	N

ANALYSIS TYPE: EP TOXICITY

TITLE: Linwood Quarry

MATRIX: WATER

UNITS: UG/L

LAB: Rocky Mtn. Anal. LAB: Rocky Mtn. Anal.

SAMPLE PREP:

REVIEW LEVEL: 2

METHOD: C0788EM

REVIEWER:

DATA FILE: M96

CASE: 5051G

DATE: 02/07/90

SAMPLES	DSX04001	DSX04002
ARSENIC	4.7 J	3.4 J
BARIUM	180 J	240 J
CADMIUM	15 U	15 U
CHROMIUM	25 U	25 U

MERCURY SELENIUM

SILVER

LEAD

50 U 0.20 U

25 U 50 U 0.20 U

12 J 25 U 50 U 25 U

ANALYSIS TYPE: SULFIDE

TITLE: LINWOOD QUARRY

UNITS: MG/KG

LAB: ENSECO/RMAL

SAMPLE PREP:

ARRY

MATRIX: FLY ASH

METHOD: C9030SA

ANALYST/ENTRY: PLC REVIEWER: DATE: 02/09/90

DATA FILE: P52

REVIEW LEVEL: 2

SAMPLE NO. RESULT

DSX04001

DSX04002

.5 U

ANALYSIS TYPE: SEMIVOLATILES -- PAGE 1

TITLE: LINWOOD QUARRY

LAB: EIRA

SAMPLE PREP:

REVIEW LEVEL: 2

MATRIX: SEDIMENT

METHOD: CS0288A

CASE: 13396

DATA FILE DATA FILE DATA

DATA	FILE	:	P31	

SAMPLES	DSX04001	
PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3 DICHLOROBENZENE 1,4 DICHLOROBENZENE BENZYL ALCOHOL 1,2 DICHLOROBENZENE 2-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER	530 U	480 U
BIS (2-CHLOROETHYL) ETHER	530 U	480 U
2-CHLOROPHENOL	530 U	480 U
1,3 DICHLOROBENZENE	530 U	480 U
1,4 DICHLOROBENZENE	530 U	480 U
BENZYL ALCOHOL	530 U	480 U
1,2 DICHLOROBENZENE	530 U	480 U
2-METHYLPHENOL	530 U	480 U
4-METHYLPHENOL	530 U	480 U
N-NITROSO-DIPROPYLAMINE	530 U	480 U
HEXACHLOROETHANE	530 U	480 U
4-METHYLPHENOL N-NITROSO-DIPROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BENZOIC ACID BIS(2-CHLOROETHOXY) METHANE	530 U	480 U
ISOPHORONE	530 U	480 U
2-NITROPHENOL	530 U	480 U
2,4-DIMETHYLPHENOL	530 U	480 U
BENZOIC ACID	2600 U	2300 U
BIS (2-CHLOROETHOXY) METHANE	530 U	480 U
2,4 DICHLOROPHENOL	530 U	480 U
BENZOIC ACID BIS (2-CHLOROETHOXY) METHANE 2,4 DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE	530 U	480 U
NAPHTHALENE	140 J	480 0
4-CHLOROANILINE	530 0	480 0
A-CHIODO-3-METHYL DUENOL	530 0	480 0
2-METHILPHENOL	230 U	480 0
2-MEINITHWARHINALENE	530 II	480 0
2 A 6-MDICUIODODUFNOI	530 U	480 TI
2 4 5-TDICHLODODHENOI.	2600 11	2300 ti
2-CHIORONA PHTHALENE	530 U	480 U
2-NITROANTITUE	2600 U	2300 U
DIMETHYL PHTHALATE	530 U	480 U
ACENAPHTHYLENE	530 U	480 U
3-NITROANILINE	2600 U	2300 U
ACENAPHTHENE	530 U	480 U
2.4-DINITROPHENOL	2600 U	2300 U
4-NITROPHENOL	2600 U	2300 U
DIBENZOFURAN	530 U	480 U
2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 2,4,6-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYLPHTHALATE ACENAPHTHYLENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE	530 U	480 U
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ANALYSIS TYPE: SEMIVOLATILES--PAGE 2

TITLE: LINWOOD QUARRY

LAB: EIRA

SAMPLE PREP:

REVIEW LEVEL: 2

MATRIX: SEDIMENT

METHOD: CS0288A

CASE: 13396

DATE: 01/30/90

DATA FILE: P32

SAMPLES	DSX04001	DSX04002
2,6-DINITROTOLUENE	530 U	480 U
DIETHYLPHTHALATE	530 U	480 U
4-CHLOROPHENYL PHENYL ETHER	530 U	480 U
FLUORENE	530 U	480 U
4-NITROANILINE	2600 U	
4,6-DINITRO-2-METHYLPHENOL	2600 U	2300 U
N-NITROSODIPHENYLAMINE	530 U	480 U
4-BROMOPHENYL PHENYL ETHER	530 U	480 U
HEXACHLOROBENZENE	530 U	480 U
PENTACHLOROPHENOL	2600 U	2300 U
PHENANTHRENE	530 U	
ANTHRACENE	530 U	480 U
DI-N-BUTYLPHTHALATE	530 U	480 U
FLUORANTHENE	530 U	480 U
PYRENE	530 U	480 U
BUTYL BENZYL PHTHALATE	530 U	480 U
3,3' DICHLOROBENZIDINE	1100 U	
BENZO (A) ANTHRACENE	530 U	480 U
BIS(2-ETHYLHEXYL)PHTHALATE	530 U	480 U
CHRYSENE	530 U	
DI-N-OCTYL PHTHALATE	530 U	
BENZO(B) FLUORANTHENE	530 U	480 U
BENZO(K) FLUORANTHENE	530 U	480 U
BENZO (A) PYRENE	530 U	480 U
INDENO(1,2,3-CD)PYRENE	530 U	480 U
DIBENZO (A, H) ANTHRACENE	530 U	480 U
BENZO(G,H,I) PERYLENE	530 U	480 U

TENTATIVELY IDENTIFIED COMPOUNDS

MATRIX: SEDIMENT UNITS: UG/KG TITLE: LINWOOD QUARRY METHOD: CS0288A CASE: 13396 LAB: EIRA

DATE: 01/30/90 ANALYST/ENTRY: PLC

REVIEWER: DATA FILE : P33 REVIEW LEVEL: 2

SAMPLE NO.	COMPOUND NAME	FRACTION	EST. CONCENTRATION
DSX04001 C9H12 ISOM C10H14 ISOM 16 UNKNOWN UNKNOWN ALM UNKNOWN	MER ALKANES	BNA BNA BNA BNA BNA	600 J 600 J 400-3000 J 400 J 500 J
DSX04002 UNKNOWN ALI	KANE	BNA	500 J

^{*} THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

^{**} THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

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U.S. Environmental Protection Agency
WSTM/SPFD/PREP
726 Minnesota Avenue
——Kansas City, KS 66101

Plulier

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Mr. Charles Burke Linwood Mining and Materials Corp. 401 East Front Street Davenport, IA 52804

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